

one or two cards in a box designed to sit on top of a television having VGA input. In another version, all the circuitry is included inside of the television chassis.

In one embodiment, full multi-media signal sourcing and destinationing of audio/video/digital-data (A/V/D) broadcasts is provided for. Referring to FIG. 1, one embodiment of signal 116 from satellite dish 114 provides digital A/V/D signals from such sources as DirectTV or Primestar. In another such embodiment, signal 116 provides analog A/V such as NTSC antenna signals. In another such embodiment, signal 157 from camera 156 provides analog A/V such as NTSC audio/video signals. In further embodiments, signal 175 from cable source 174 provides analog and/or digital A/V/D. In further such embodiments, signal 163 from PSTN 162 provides data or phone signals such as ISDN or POTS signals. In one set of such embodiments, computer 118 is programmed to automatically record analog signals, such as television programming, onto recordable media, such as video tape, in VCR 172 coupled to cable 173. In another such set of such embodiments, computer 118 is programmed to automatically record digital signals, such as digital television programming or CD-ROM-type audio, onto recordable media, such as recordable compact disks, in CD jukebox 168 coupled to cable 169. CD jukebox 168 also plays CDs or CDROMS for use elsewhere. In another such embodiment, signals are sent to stereo-surround sound system 158 for audio output to one or more speakers 160, and on cable 151 to TV 150. In one such embodiment, earphones 154 on cable 155 and gamepad 152 on cable 153 provide additional input/output through remote control 126. Home network 164 is "smart wiring" used to transmit data and control within the home, coupled by cable 165 to computer 118. VideoBlaster 170 provides video-signal processing on cable/connector 171. Cables 175, 116, 163, 157, 151, 173, 171, 169, 155, and 153 can be wired coupling or wireless (such as RF or IR signals without wires).

It is to be understood that the above description is intended to be illustrative, and not restrictive. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. The scope of the invention should, therefore, be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled.

What is claimed is:

1. An entertainment system, comprising:

a personal computer having a bus;

a receiver coupled to the bus for receiving a compressed digital video signal from a source external to the system;

a tuner coupled to the bus for separating out discrete channels of video signal;

a decompressor coupled to the bus for receiving at least one channel of the compressed digital video signal from the tuner and decompressing the signal into a decompressed digital video signal; and

a video driver coupled to the bus for receiving the decompressed digital video signal and converting the decompressed video signal into VGA analog signals; and

a large screen data quality monitor for receiving the VGA analog signals and displaying the video images therein on a screen capable of a resolution of at least 640 by 480 pixels, wherein at no time are such video images displayed on the monitor converted to NTSC which would result in loss of video image quality.

2. An entertainment system, comprising:

a personal computer having a processor, a main memory, a secondary storage device, and a bus for connecting the processor, the main memory and the secondary storage device and for receiving signals from multiple circuits;

a tuner for receiving a compressed digital video broadcast signal and tuning the signal into discrete channels of digital video;

a decompressor coupled to the tuner and to the bus for receiving at least one channel of compressed digital video signal and decompressing the signal into a decompressed digital video signal;

a monitor driver coupled to the bus for receiving the decompressed digital video signal and converting the decompressed video signal into standard VGA analog signals; and

a large screen data quality monitor for receiving the VGA analog signals and displaying the video images therein on a screen capable of a resolution of at least 640 by 480 pixels, wherein at no time are such video images displayed on the monitor converted to NTSC which would result in loss of video image quality.

3. The system of claim 2 wherein the bus is a personal computer standard PCI bus, allowing video data to be processed by all the devices attached to the PCI bus.

4. The system of claim 3 wherein the main memory is coupled to the bus, and provides memory storage for:

a fifo memory buffer of fixed size, and

a buffer controller for controlling the buffer to store compressed digital video signals, and to provide the buffered compressed digital video signals to a decompressor in response to the system controller.

5. The system of claim 2 wherein the compressed digital video broadcast signal is compressed in accordance with MPEG standards, and the decompressor comprises an MPEG decompression circuit.

6. The system of claim 5 wherein the MPEG compression is MPEG-1 compliant.

7. The system of claim 5 wherein the MPEG compression is MPEG-2 compliant.

8. The system of claim 2 wherein the monitor has a diagonal viewing size of at least 27 inches.

9. The system of claim 2 wherein the monitor has a diagonal viewing size of at least 31 inches.

10. The system of claim 2 wherein the monitor is non-interlaced, providing a stable image of text characters.

11. The system of claim 2 and further comprising a audio processing card coupled to the bus for receiving audio data encoded in the digital video signal and providing an output suitable for driving speakers.

12. The system of claim 11 wherein the audio processing card further comprises an input for accepting signals from a microphone.

13. The system of claim 11 wherein the audio processing card further comprises an input for accepting signals from audio CD players.

14. The system of claim 11 wherein the audio processing card further comprises an FM synthesis circuit for synthesizing sound.

15. The system of claim 11 wherein the audio processing card further comprises a wavetable synthesis circuit for synthesizing sound.

16. The system of claim 11 wherein the audio processing card further comprises:

an FM synthesis circuit for synthesizing sound

a wavetable synthesis circuit for synthesizing sound; and